

Practitioner's Docket No. 013743.0104PTUS

CHAPTER II

Preliminary Classification:

Proposed Class: Unknown

Subclass: Unknown

**TRANSMITTAL LETTER
TO THE UNITED STATES ELECTED OFFICE (EO/US)****(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)**

PCT/US2003/013125	28 April 2003	27 April 2002
International Application Number	International Filing Date	International Earliest Priority Date

TITLE OF INVENTION: **Nanocomposite Ceramics Of Oxide And Non-Oxide Phases And Methods For Producing Same**

APPLICANTS: Rishi Raj, Atanu Saha, Sandeep Shah

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
ATTENTION:EO/US

1. Applicant herewith submits to the United States Elected Office (EO/US) the following items under 35 U.S.C. Section 371:

- a. This express request to immediately begin national examination procedures (35 U.S.C. Section 371(f)).
- b. The U.S. National Fee (35 U.S.C. Section 371(c)(1)) and other fees (37 C.F.R. Section 1.492) as indicated below:

CERTIFICATION UNDER 37 C.F.R. SECTION 1.10**(Express Mail label number is mandatory.)**(Express Mail certification is optional.)*

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date October 14, 2004 in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EV389084492US, addressed to Mail Stop PCT, Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, ATTENTION: EO/US.

Elaine C. VonSpreckelsen
(type or print name of person mailing paper)

Elaine C. VonSpreckelsen
Signature of person mailing paper

DT05 Rec'd PCT/PTO 14 OCT 2004

2. Fees

CLAIMS FEE*	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
BASIC FEE	TOTAL CLAIMS	45 -20 =	25	x \$18.00 =	\$450.00
	INDEPENDENT CLAIMS	6 -3 =	3	x \$88.00 =	\$264.00
	MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$280.00				\$0.00
	U.S. PTO WAS NOT INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY Where no international preliminary examination fee as set forth in Section 1.482 has been paid to the U.S. PTO, and payment of an international search fee as set forth in Section 1.445(a)(2) to the U.S. PTO: where a search report on the international application has been prepared by the European Patent Office or the Japanese Patent Office (37 C.F.R. Section 1.492(a)(5)) \$920.00				\$1110.00
SMALL ENTITY	Total of above Calculations				=\$1824.00
	Reduction by 1/2 for filing by small entity, if applicable				- \$912.00
	Subtotal				\$912.00
	Total National Fee				\$912.00
	Fee for recording the enclosed assignment document \$40.00 (37 C.F.R. Section 1.21(h)). See attached "ASSIGNMENT COVER SHEET".				\$ 40.00
TOTAL	Total Fees enclosed				\$952.00

Please charge Account No. 50-1848 in the amount of \$952.00.

3. A Combined Declaration And Power Of Attorney signed by the Inventors is enclosed.
 4. A Recordation Cover Sheet (Form PTO-1595) and PCT Assignment by the Inventors are transmitted herewith.
- II. Other document(s) or information included:
5. A full International Search Report (PCT/ISA/220) or Declaration under PCT Article 17(2)(a) has not yet been received. However, an Invitation to Pay Additional Fees Form PTO/ISA/206, including a partial search report, is transmitted herewith.
 6. An Information Disclosure Statement (Form PTO/SB/08B) under 37 C.F.R. Sections 1.97 and 1.98 is transmitted herewith.

DT05 Rec'd PCT/PTO 14 OCT 2004

7. Additional documents:
- a. International Publication No. WO 2003/093193 A2, including specification, claims, and drawings
 - b. Preliminary Amendment
 - c. Application Data Sheet
 - d. Fee Transmittal
 - e. Express Mail Certificate
 - f. Return receipt postcard
8. The above items are being transmitted before 30 months from any claimed priority date.

No international examination report (PCT/IPEA/409) has yet been transmitted, but will be forwarded when received.

AUTHORIZATION TO CHARGE ADDITIONAL FEES

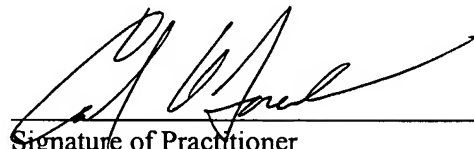
The Commissioner is hereby authorized to charge the following additional fees that may be required by this paper and during the entire pendency of this application to Account No. 50-1848.

37 C.F.R. Section 1.492(a)(1), (2), (3), and (4) (filing fees)
37 C.F.R. Section 1.492(b), (c), and (d) (presentation of extra claims)
37 C.F.R. Section 1.17 (application processing fees)
37 C.F.R. Section 1.17(a)(1)-(5) (extension fees pursuant to Section 1.136(a))
37 C.F.R. Section 1.492(e) and (f) (surcharge fees for filing the declaration and/or filing an English translation of an International Application later than 20 months after the priority date).

Date: _____

10/14/04

Reg. No.: 28,494
Tel. No.: 303-894-6114
Fax No.: 303-894-9239



Signature of Practitioner
Carl A. Forest
Customer No.: 24283

Certificate of Mailing under 37 CFR 1.10	Application Number	Applied For
	Filing Date	Herewith
	First Named Inventor	Rishi Raj
	Examiner Name	Unknown
	Attorney Docket Number	013743.0104PTUS

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage in an Express Mail envelope bearing label number: EV389084492US addressed to:

Mail Stop PCT
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: EO/US

On October 14, 2004
(Date)

Elaine C. VonSpreckelsen
Signature

Elaine C. VonSpreckelsen
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Documents submitted with this Certificate of Mailing if more than one:

1.	Transmittal Letter To The United States Elected Office (3 pages)
2.	Fee Transmittal Form PTO/SB/17 (2 for a total of 2 pages)
3.	Preliminary Amendment (8 pages)
4.	Copy of International Publication No. WO 03/093193 A2, including specification, claims, and drawings (22 pages)
5.	Combined Declaration And Power Of Attorney (2 pages)
6.	Application Data Sheet (4 pages)
7.	Recordation Form Cover Sheet Form PTO-1595 (1 page)
8.	PCT Assignment (3 pages)
9.	Copy of Invitation To Pay Additional Fees Form PCT/ISA/206, including partial search report (6 pages)
10.	Information Disclosure Statement Form PTO/SB/08b (1 page)
11.	Copies of IDS References (3 Other)
12.	Return Receipt Postcard

10/511464

PTO/SB/17 (10-04v2)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL
for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

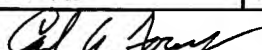
☒ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 952

DT05 Rec'd PTO 14 OCT 2004

Application Number	Applied For
Filing Date	Herewith
First Named Inventor	Rishi Raj
Examiner Name	Unknown
Art Unit	Unknown
Attorney Docket No.	013743.0104PTUS

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)																																																																																																																																																																																																	
<input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money <input type="checkbox"/> Other <input type="checkbox"/> None Order				3. ADDITIONAL FEES																																																																																																																																																																																																	
<input checked="" type="checkbox"/> Deposit Account: Deposit Account Number: 50-1848 Deposit Account Name: Patton Boggs LLP				<table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td></td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>1252</td><td>430</td><td>2252</td><td>215</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253</td><td>980</td><td>2253</td><td>490</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1254</td><td>1,530</td><td>2254</td><td>765</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255</td><td>2,080</td><td>2255</td><td>1,040</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401</td><td>340</td><td>2401</td><td>170</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402</td><td>340</td><td>2402</td><td>170</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>1403</td><td>300</td><td>2403</td><td>150</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1451</td><td>1,510</td><td>1451</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1453</td><td>1,370</td><td>2453</td><td>685</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1501</td><td>1,370</td><td>2501</td><td>685</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>1502</td><td>490</td><td>2502</td><td>245</td><td>Design issue fee</td><td></td></tr> <tr><td>1503</td><td>660</td><td>2503</td><td>330</td><td>Plant issue fee</td><td></td></tr> <tr><td>1460</td><td>130</td><td>1460</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17 (q)</td><td></td></tr> <tr><td>1806</td><td>180</td><td>1806</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>40</td></tr> <tr><td>1809</td><td>790</td><td>2809</td><td>395</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>1810</td><td>790</td><td>2810</td><td>395</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>1801</td><td>790</td><td>2801</td><td>395</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>1802</td><td>900</td><td>1802</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="4">Other fee (specify) (1613) National Phase Fee filing with EPO search report</td><td></td><td>555</td></tr> <tr><td colspan="4">*Reduced by Basic Filing Fee Paid</td><td colspan="2">SUBTOTAL (3) (\$ 595)</td></tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	65	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	110	2251	55	Extension for reply within first month		1252	430	2252	215	Extension for reply within second month		1253	980	2253	490	Extension for reply within third month		1254	1,530	2254	765	Extension for reply within fourth month		1255	2,080	2255	1,040	Extension for reply within fifth month		1401	340	2401	170	Notice of Appeal		1402	340	2402	170	Filing a brief in support of an appeal		1403	300	2403	150	Request for oral hearing		1451	1,510	1451	1,510	Petition to institute a public use proceeding		1452	110	2452	55	Petition to revive - unavoidable		1453	1,370	2453	685	Petition to revive - unintentional		1501	1,370	2501	685	Utility issue fee (or reissue)		1502	490	2502	245	Design issue fee		1503	660	2503	330	Plant issue fee		1460	130	1460	130	Petitions to the Commissioner		1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)		1806	180	1806	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40	1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))		1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))		1801	790	2801	395	Request for Continued Examination (RCE)		1802	900	1802	900	Request for expedited examination of a design application		Other fee (specify) (1613) National Phase Fee filing with EPO search report					555	*Reduced by Basic Filing Fee Paid				SUBTOTAL (3) (\$ 595)	
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																																
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																		
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																																																																	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.																																																																																																																																																																																																	
1053	130	1053	130	Non-English specification																																																																																																																																																																																																	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																																																																	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																																	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																																	
1251	110	2251	55	Extension for reply within first month																																																																																																																																																																																																	
1252	430	2252	215	Extension for reply within second month																																																																																																																																																																																																	
1253	980	2253	490	Extension for reply within third month																																																																																																																																																																																																	
1254	1,530	2254	765	Extension for reply within fourth month																																																																																																																																																																																																	
1255	2,080	2255	1,040	Extension for reply within fifth month																																																																																																																																																																																																	
1401	340	2401	170	Notice of Appeal																																																																																																																																																																																																	
1402	340	2402	170	Filing a brief in support of an appeal																																																																																																																																																																																																	
1403	300	2403	150	Request for oral hearing																																																																																																																																																																																																	
1451	1,510	1451	1,510	Petition to institute a public use proceeding																																																																																																																																																																																																	
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																																																																	
1453	1,370	2453	685	Petition to revive - unintentional																																																																																																																																																																																																	
1501	1,370	2501	685	Utility issue fee (or reissue)																																																																																																																																																																																																	
1502	490	2502	245	Design issue fee																																																																																																																																																																																																	
1503	660	2503	330	Plant issue fee																																																																																																																																																																																																	
1460	130	1460	130	Petitions to the Commissioner																																																																																																																																																																																																	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)																																																																																																																																																																																																	
1806	180	1806	180	Submission of Information Disclosure Stmt																																																																																																																																																																																																	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40																																																																																																																																																																																																
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																																	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																																	
1801	790	2801	395	Request for Continued Examination (RCE)																																																																																																																																																																																																	
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																																																																	
Other fee (specify) (1613) National Phase Fee filing with EPO search report					555																																																																																																																																																																																																
*Reduced by Basic Filing Fee Paid				SUBTOTAL (3) (\$ 595)																																																																																																																																																																																																	
1. BASIC FILING FEE <table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1001</td><td>790</td><td>2001</td><td>395</td><td>Utility filing fee</td><td></td></tr> <tr><td>1002</td><td>350</td><td>2002</td><td>175</td><td>Design filing fee</td><td></td></tr> <tr><td>1003</td><td>550</td><td>2003</td><td>275</td><td>Plant filing fee</td><td></td></tr> <tr><td>1004</td><td>790</td><td>2004</td><td>395</td><td>Reissue filing fee</td><td></td></tr> <tr><td>1005</td><td>160</td><td>2005</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="4">SUBTOTAL (1)</td><td></td><td>(\$ 0)</td></tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1001	790	2001	395	Utility filing fee		1002	350	2002	175	Design filing fee		1003	550	2003	275	Plant filing fee		1004	790	2004	395	Reissue filing fee		1005	160	2005	80	Provisional filing fee		SUBTOTAL (1)					(\$ 0)	2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE <table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1202</td><td>18</td><td>2202</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>1201</td><td>88</td><td>2201</td><td>44</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>1203</td><td>300</td><td>2203</td><td>150</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>1204</td><td>88</td><td>2204</td><td>44</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>1205</td><td>18</td><td>2205</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> <tr><td colspan="4">SUBTOTAL (2)</td><td></td><td>(\$ 357)</td></tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1202	18	2202	9	Claims in excess of 20		1201	88	2201	44	Independent claims in excess of 3		1203	300	2203	150	Multiple dependent claim, if not paid		1204	88	2204	44	** Reissue independent claims over original patent		1205	18	2205	9	** Reissue claims in excess of 20 and over original patent		SUBTOTAL (2)					(\$ 357)																																																																																																		
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																																
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																		
1001	790	2001	395	Utility filing fee																																																																																																																																																																																																	
1002	350	2002	175	Design filing fee																																																																																																																																																																																																	
1003	550	2003	275	Plant filing fee																																																																																																																																																																																																	
1004	790	2004	395	Reissue filing fee																																																																																																																																																																																																	
1005	160	2005	80	Provisional filing fee																																																																																																																																																																																																	
SUBTOTAL (1)					(\$ 0)																																																																																																																																																																																																
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																																
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																		
1202	18	2202	9	Claims in excess of 20																																																																																																																																																																																																	
1201	88	2201	44	Independent claims in excess of 3																																																																																																																																																																																																	
1203	300	2203	150	Multiple dependent claim, if not paid																																																																																																																																																																																																	
1204	88	2204	44	** Reissue independent claims over original patent																																																																																																																																																																																																	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																																	
SUBTOTAL (2)					(\$ 357)																																																																																																																																																																																																

**or number previously paid, if greater; For Reissues, see above

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Carl A. Forest	Registration No. (Attorney/Agent)	28,494	Telephone	303-894-6114
Signature		Date	October 14, 2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.